A RARE BLUE-GREEN ALGA FROM MASSACHU-SETTS — Hampshire county in western Massachusetts, in contrast to the eastern part of the state, is a region for which no detailed knowledge of the algae exists. Of particular interest, then, are the rather rare algae which may be encountered in such an area.

During a preliminary investigation of several freshwater habitats near Amherst, such an alga, *Nostochopsis lobatus* Wood was collected. The gelatinous colonies of this species, resembling those of *Nostoc* in habit, were attached to shaded rocks in the gently flowing water of Bachelor Brook, South Hadley, Massachusetts. These plants, growing in association with *Cladophora* sp. and *Oedogonium* sp., were first collected in July; at this time, the water temperature was 24° C. and the pH was 7.6.

The basal cells of the trichomes are somewhat rounded, constricted at their septa, and measure  $2.1\mu \times 3\mu$ ; the distal cells are conspicuously narrower, lack constrictions, and measure  $1.4\mu \times 3.5\mu$ . The lateral heterocysts are either

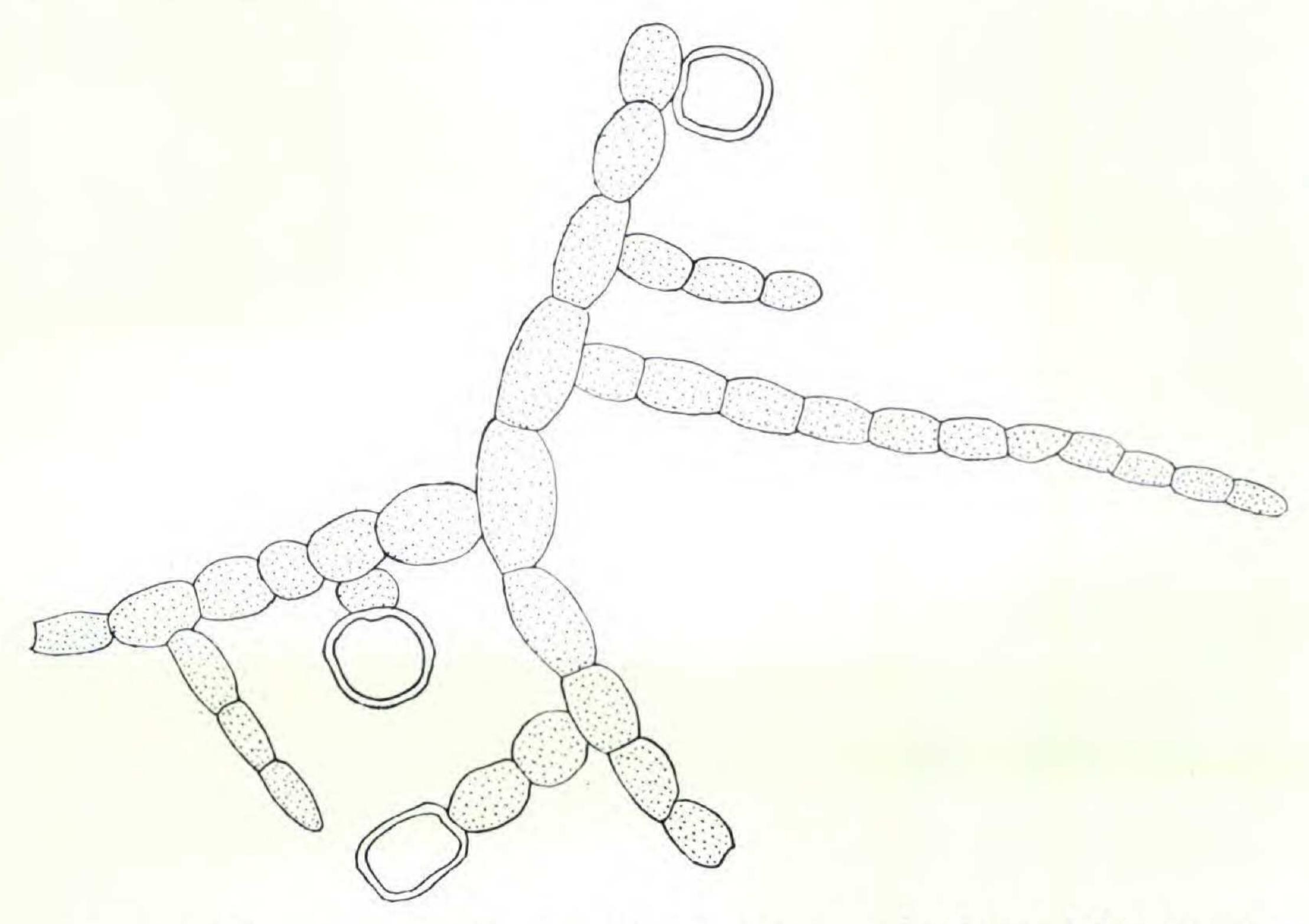


Fig. 1. Nostochopsis lobatus Wood showing the lateral heterocysts and manner of branching, ca. × 660.

sessile or terminal on very short branches. True branching is present (Fig. 1).

According to Geitler (2), trichomes of Nostochopsis lobatus vary in width from  $2\mu$  to  $9\mu$ . Tilden (3) presents trichome widths of  $4\mu$  to  $9\mu$  for the then recorded New England representatives of this species. It is interesting, therefore, that these Massachusetts plants from South Hadley, collected over a period of several months, have consistently exhibited the minimum cell-width range possible within the species.

Although several species of *Nostochopsis* are known from Europe, only one species, *N. lobatus*, is known to occur in the United States. Its pattern of distribution here is mainly along the eastern and southeastern coast, although it has been collected in Indiana, Arizona, and Washington (1).

Therefore, these current records of *Nostochopsis lobatus* are of special interest. They not only represent the first published account of its presence in Massachusetts, but they also appear to illustrate the extreme minimum cell width possible within the species.

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